

ABSTRACT

This invention is directed to a 3-dimensional imaging lidar,
5 which utilizes modest power kHz rate lasers, array detectors,
photon-counting multi-channel timing receivers, and dual wedge
optical scanners with transmitter point-ahead correction to
provide contiguous high spatial resolution mapping of surface
features including ground, water, man-made objects, vegetation
10 and submerged surfaces from an aircraft or a spacecraft.